

Ethnic Groups and the Coffee Industry in Hawai'i

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The first reference to an attempt to cultivate coffee in Hawai'i was made by the Spaniard, Don Francisco de Paula y Marin, who recorded in his journal dated January 21, 1813,¹ that he had planted coffee seedlings on the island of O'ahu. Evidently his planting was not successful. When H.M.S. *Blonde* brought 30 live coffee plants from Rio de Janeiro, Brazil, in May, 1825, this introduction was referred to as the first successful introduction of coffee plants into Hawai'i, with an additional remark that "if the plant had been introduced before, it had become extinct."²

These live coffee seedlings were brought by John Wilkinson, a practical gardener from England who was commissioned by Governor Boki of O'ahu to develop and supervise a plantation type of farming in Hawai'i. For this purpose, Wilkinson was provided with a suitable piece of land to plant coffee and sugar cane in Manoa Valley. The exact location of this field is not known, but it is presumed to have been somewhere on the present University of Hawai'i campus in Manoa or in its neighborhood.

Wilkinson began clearing the land in July or August, 1825. Hawaiian laborers were hired at 25 cents a day to prepare the land with primitive digging sticks, such as the 'o'o. Thirty coffee seedlings and a hundred acres of sugar cane were planted in Mānoa. Both the coffee and sugar cane grew satisfactorily. But in 1827 when the coffee trees were just beginning to produce, Wilkinson became ill and died. After his death, these coffee trees were neglected, although for years they continued to produce coffee. From time to time, the berries were harvested by various people.³

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About this same period coffee plants were introduced from Manila, Philippines, by British consul Richard Charlton, and from Batavia, Dutch East Indies, by a certain Captain Little. Godfrey Rhodes credited the Charlton introduction as "the parent stock of the Hawaiian plantations."⁴

One of those who used the Wilkinson coffee seeds was Captain Alexander Adams, a Scotsman, who planted the seedlings on his land in Kalihi and Niu Valleys. Coffee of high quality was produced.⁵ Rev. Joseph Goodrich, an American missionary, planted coffee on the mission grounds in Hilo as early as 1827. Another American missionary, Samuel Ruggles, was the first to plant coffee in Kona, at Nāole, in 1828 or 1829.⁶ These test plantings of coffee seedlings in various places in the Kingdom in the early days were considered successful, and the possibility of growing coffee on a commercial basis became a popular subject for discussion among the newly-arrived *haoles*.⁷

THE FIRST COFFEE PLANTATION

The first commercial coffee plantation was started in Kōloa, Kaua'i, in 1836. Sherman Peck and Charles Titcomb subleased 400 acres of land from Ladd & Company to plant coffee, cotton, and mulberry trees to raise silk worms. They employed Hawaiians at 12-1/2 cents a day, with an allowance for food.⁸ Coffee of high grade was produced, but unfortunately, the company's main project, silk, was a failure.⁹ Hence, the Kōloa company was dissolved.

In 1842, to encourage the production of coffee, the government enacted a law to allow payment of land taxes in coffee as well as in pigs, which had been the common tax payment up to that time. The Act also imposed a three percent duty on all foreign coffee imported into the Kingdom.¹⁰ This tax was increased to five percent in 1845.

COFFEE IN HANAIEI

Response to the government's policy of encouraging coffee growing was good. Small areas of coffee were planted wherever possible, even in remote and neglected revines and valleys on O'ahu, Maui and Hawai'i. But it was on Kaua'i where the most impressive development took place. Godfrey Rhodes, an Englishman, and John Bernard, a Frenchman, started the first large-scale coffee plantations in the beautiful valley of Hanalei. Eventually, when Titcomb also moved to Hanalei, the plantations in the valley became a continuous planting of a thousand acres of coffee trees. But after a promising start a series of misfortunes in the

next decade doomed the Hanalei coffee enterprises. The first major set-back came in 1846 when, through lack of planning, a shortage of coffee pickers to harvest that year's huge crop caused a disastrous financial loss. The following year, two weeks of heavy and continuous rains flooded the orchards and damaged the trees loaded with coffee. Two years later, when the trees had partially recovered from the flood, a severe drought damaged the Hanalei coffee trees. It weakened the trees and reduced the crop. Then the California gold rush of 1849 lured away many of the best workers. Left behind were the aged and crippled, who took advantage of the labor shortage and demanded wages as high as five dollars a day.

COFFEE REPLACED BY SUGAR CANE

The year 1852 was the beginning of the end of the coffee plantations at Hanalei. The drought-weakened coffee trees were attacked by the white scale (*Pulvinaria psidii*) and its companion, the black fungus smut, which lives on the secretion of the scale. At that time, there were no control measures for the infestation and the damage continued unabated, spreading throughout the Hawaiian Islands. In 1856, Rhodes and his associates finally sold their interest in the coffee plantations to R. C. Wyllie, Minister of Foreign Affairs of the Kingdom. He abandoned the entire coffee planting of Hanalei and planted the land in sugar cane.¹¹

The Hanalei failure made *haole* entrepreneurs fearful of coffee. First, there was no remedy for the devastating black fungus which had spread to all islands. The pioneers found that they needed large amounts of capital to carry a project until it paid for itself, and that coffee required a large labor force—which at 33 cents a day cost too much for profitable production. Ultimately, many shifted their interest from coffee to the more secure sugar industry. By 1860, coffee literally disappeared from Kaua'i and the decline continued in the other islands in the Kingdom.

The Hāmākua and Kona Districts on the Island of Hawai'i were the exceptions, although the large plantations were abandoned as unprofitable. In the case of Hāmākua, the coffee fields were located above the sugar belt so a couple hundred acres of coffee orchards were continued.

In Kona, the early pioneering Americans and Europeans observed that coffee did best on the leeward slopes of Hualālai and Mauna Loa, the same area where the Hawaiians had been growing their upland taro from time immemorial. This "taro belt," later renamed the "coffee belt," is a narrow strip of volcanic land, rocky and sloping, one to two miles in width, located approximately between 800 to 1700 feet above sea level. Because of the high altitude, this land is unsuitable for sugar cane. So

coffee growing continued, but it shifted from the large, *haole*-owned plantations to family units of Hawaiians.

HAWAIIANS AS COFFEE PRODUCERS

From 1836 to 1855, coffee plantations in Hawai'i were primarily under the management of Americans and Europeans. But from 1860 to 1885, Hawaiians took over the small surviving patches of coffee trees which were found growing under the kukui trees.¹² All those coffee trees in the plantations without shade were overwhelmed by weeds and died within a few years. The remaining patches of coffee trees were scattered here and there—not too many but enough to keep many Hawaiians busy during the harvesting season. The following description of the industry in Kona at this period was given by an eye-witness, John Gaspar:

When I arrived here 65 years ago, there were many patches of coffee both in North and South Kona. They were growing under the kukui trees and were not planted regularly. The systematic method of planting was made after the Japanese came to Kona.

In those days, *Kanakas* were the only coffee planters. They lived down on the beach and went up to the coffee patches only to pick coffee. Coffee trees grew wild without being hoed or pruned. Once in several months, tall weeds were pulled out, but usually weeds could not grow as these trees were never pruned, and as they grew under the kukui shade, there was not enough sunlight for any weeds to grow.

There were only horse trails in those days. The *Kanakas* used to pack the coffee on their back from the patches to the beach to dry. Many had horses so that was another way of packing. Very little care was given in the preparation of the coffee. I made the first coffee mill at Nāpo'opo'o. I used to buy the coffee from them but never paid cash. We always exchanged parchment coffee with merchandise. This was a profitable business. Everybody who dealt with the natives made money. *Kanakas* used to work for a quarter a day.¹³

The most disheartening development in the coffee market during the last half of the 1860s and early 1870s was the loss of the excellent reputation (and the price) which Kona coffee had enjoyed in the San Francisco market. Coffee shipped under the trademark of H. N. Greenwell was accepted without question because the quality of his product never changed. H. N. Greenwell was a well-known Kona trader who took great pains in selecting his coffee for the market.¹⁴ But this was not true with the rest of the coffee from Kona. John G. Machado, whose father had planted 80 acres of coffee under the kukui trees in lower Ke'ei, South Kona, in 1885, in partnership with Archibald S. Cleghorn, father of Princess Ka'iulani, told the writer in an interview in 1934: "The deterioration of the quality of Kona coffee was due largely to the fact that when the white people abandoned their coffee farms, growing of coffee was left largely in the hands of the Hawaiians, who were neither equipped nor trained to process coffee properly."¹⁵

An interesting description of the preparation of coffee about 1880 was related by John G. Machado. He reported that a large percentage of coffee was dried unpulped. However, if they desired to remove the pulp, the cherry coffee was usually spread thinly on a poi board and by jerking a round smooth stone about the size of an ordinary coconut over them from one end of the board to the other, the pulp was removed without much difficulty. The pulped coffee was dried without being washed or fermented to remove the parchment skin; the dried parchment was next subjected to pounding in a wooden or stone container with a long cylindrical stone 14 inches long and three inches across at the base with a slightly narrowed end where it was held by two hands. If the amount of coffee was large, a specially prepared foot-operating device, commonly used in the oriental countries for pounding rice, was used. The Hawaiians called this device *kimo laiki*. It was simply a large wooden hammer, supported by a beam and operated by foot. The parchment coffee was placed in a large wooden or stone bowl, made specially for this purpose. Machado smilingly related that the coffee thus prepared was very poor in quality as most of the beans were broken by the heavy pounding.¹⁶

THE COFFEE "BOOM" OF THE 1890S

Machado also stated that in the latter part of the 1870s, coffee prices ranged between \$10.00 and \$12.00 per hundredweight. But by 1886, the price had advanced to \$18.00, and in 1888 it jumped to \$23.80. These increases in coffee prices, and the unlimited demand for any quantity of coffee, brought about the famous coffee "boom" of the '90s throughout the world—a speculative boom which collapsed before the end of the century.

In Hawai'i, there were other factors which supported the coffee "boom" at this particular time. One of these was the dethronement of Queen Lili'uokalani in 1893. A large number of Americans and some Europeans placed confidence in the new government which had overturned the Lili'uokalani regime. Many of them invested huge sums of money in the booming coffee industry. Additional land was made available for coffee plantations when the Provisional Government confiscated the Crown Lands of Puna.¹⁷ It subdivided portions of the Crown Lands considered to be suitable for coffee into plots ranging from 10 acres to 100 acres. These lots were made available for long-term leases of 30 years.¹⁸ By March 1, 1894, prospective coffee growers had leased 85 lots consisting of 11,479 acres,¹⁹ 6,198 acres of which were planted in coffee within a few years.²⁰

Another factor which was helpful in increasing the coffee acreage was the abundance of cheap labor which became available. There were Portuguese, many Chinese, and any number of Japanese. The Japanese men could be hired for \$15 a month and women for \$7 a month.²¹

But the rising population of Asian ancestry—resulting from the importation of a large number of Chinese and Japanese to work on the sugar plantations—also led to growing concern among the Caucasians who had overthrown Queen Lili'uokalani and were looking ahead to ultimate annexation by the United States. They concluded that it would be politically wise to have a preponderant percentage of a stable agricultural population of Caucasian extraction in Hawai'i. Therefore a strong organized effort was made to settle white people as coffee planters.²²

CAUCASIAN COFFEE PLANTERS

On this subject, the 1899 edition of the *Hawaiian Almanac and Annual* (also known as *Thrum's Annual*) indicated that the effort on the part of the group to control the racial composition of Hawai'i by attracting the Nordics and Latins was successful to a certain extent because many coffee planters were Germans, Americans, Englishmen, Portuguese, Scandinavians, Russians and other Europeans. By 1898, there were at least 192 Caucasians in the coffee industry in Hawai'i.²³

The plantation system of coffee production and processing was revived again with the coming of the 1890s coffee boom. This meant the return of American and European capitalists, owners, managers, and overseers of large and small plantations. Some of the owners of plantations in North Kona were Dr. McWayne, F. W. Bartels, George McDougal, N. F. Scott, and Emil Mueller. There was a plantation owned by several Honolulu capitalists but operated by an expert from Ceylon whose name was Charles D. Miller. In South Kona, there were J. F. Morgan, F. B. McStroker, Thomas Hind, Robert Wallace, W. W. Brunner, Judge J. M. Monsarrat, W. B. Castle, J. B. Castle, and several others.²⁴

In 'Ōla'a and Puna, in addition to the two prominent local planters, Robert Rycroft and Richard A. Lyman, there were several mainland corporations operating coffee plantations.

CHINESE COFFEE INTEREST

The Chinese, too, had plantations. These were located in North Kona and South Kona and were owned and operated by two separate Chinese companies.²⁵ Actually, the Chinese became involved as early as 1852

with the arrival of the first group of contract laborers on the *Thetis*. Godfrey Rhodes in his correspondence with Foreign Minister R. C. Wyllie wrote as follows:

The wages paid to the native laborers is 25 cents per day; they feed themselves. The wages paid to the coolies are 12½ cents per day and the expense of feeding them amounts to 12½ cents more; so independently of the cost of introduction of the latter, the cost of employment of the two races is about equal. When the days are long, the laborers commence work in the morning at half past five and leave off in the evening at six; thus, including meals, working 12½ hours per day. Short days, 11 hours.²⁶

P. Cummings of Kona reported that he had several of these contract Chinese laborers on his coffee farm. These Chinese were paid 17 cents per day and their food cost 16 cents or a total of 33 cents per day. After the expiration of their contracts, there are no records to indicate what happened to these Chinese.²⁷ Probably many of them remained in Kona. Miss Ella Paris, who was born in Kona as a descendant of the early missionaries, recalled in an interview with the writer that in 1874 there were several stores on the Kona seacoast operated by Chinese who used to exchange merchandise for coffee gathered by the Hawaiians. Miss Paris said Hawaiian women liked to marry Chinese men because the men worked and cooked, and the wives didn't have to work.²⁸

C. K. Ai, who lived in Kona from 1881 to 1883, wrote in his biography, *My Seventy-nine Years in Hawai'i*, that from the early part of the 1880s, many Chinese came to Kona seeking Hawaiian wives. They married and never left Kona. Working first as common field laborers in the coffee fields, they graduated to become owners of farms. Several became storekeepers. At seaports such as Kailua, Keauhou, Nāpo'opo'o, Ho'okena and Miloli'i, there were Chinese merchants who maintained small stores, exchanging merchandise for coffee. Most of them had, on the side, a small restaurant and sometimes a coffee mill which was operated on the Chinese rice processing principle.²⁹

The *Pacific Commercial Advertiser* described a typical Chinese coffee establishment as follows:

In a corner of the yard of one of their stores stands a curious contrivance for cleaning rice. . . . The same, probably, that has been in use since the time of Confucius. This one consists of a cement hole, and a heavy beam with a wooden pounder on its end. On one end of this beam, a Chinese stands, and his weight raises the end with the pounder on it. He steps off, and the pounder descends on the coffee in the cement hole. The stepping on and off process continues until the coffee is clean. By this method, about twenty-five pounds of coffee can be cleaned in an hour. . . .³⁰

Ai stated that there was Lo Wo's store at Kahalu'u beach, and his father, Chung Cho, operated a store at Kailua. His father owned another

store at Kohana'ike which was managed by his uncle, Chang Kau. Some Chinese contract laborers ran away from the sugar plantations, particularly the Kohala plantations where there was a large colony of Chinese. They ran away before fulfilling their contract terms because in those early years field overseers, known as *lunas*, were brutal and cruel to the laborers. They drove them like cattle. Unable to bear the mistreatment, many contract laborers ran away before the expiration of the contract. They came to Kona because it was an isolated area and the "fugitives" from the plantations were hidden and protected by labor-short coffee growers. Runaways were known as *malukai* (protected ones) by the Hawaiians.³¹

At the height of the coffee "boom" old-timers in Kona recall that at least 500 Chinese were engaged in various phases of the coffee industry—field laborers, coffee farm operators, processors, wholesalers, and merchants. Good coffee farms were owned by Chinese while the Japanese and the Hawaiians usually occupied the poor fields. Fat donkeys usually belonged to the Chinese and lean ones were the property of the Japanese and Hawaiians. These statements simply meant that the Chinese were wealthier than the Japanese or the Hawaiians. In those days, Japanese laborers were employed by the Chinese coffee growers, just as the Filipinos were employed by the Japanese coffee farmers in later years.³²

With annexation by the United States in 1898, the Chinese Exclusion Act, which barred Chinese immigrants from the continental United States, became applicable to Hawai'i. A shortage of Chinese workers developed and this created a great demand for local Chinese to work in the rice industry in Hawai'i. As this situation coincided with the decline in the coffee price and the collapse of the coffee "boom," the Chinese were the first to leave Kona and coffee. By 1905, when the price of coffee fell below \$10 per hundredweight, most of the Chinese had left Kona for the rice fields or more profitable enterprises.

An outstanding *haole* coffee plantation during the "boom" period was the Kona Tea and Coffee Company of Kahalu'u, North Kona, with 120 acres in coffee and five acres in tea. Charles D. Miller, an Englishman and coffee expert from Ceylon, was the manager of this plantation. He introduced many new systematic cultivation practices, which he shared with other coffee planters. To him goes the credit of securing some Guatemalan coffee seeds, from John Horner of Kūka'iau, and installing the first nursery of the Guatemalan strain of coffee seedlings in Kona.³³

WIDEMANN INTRODUCES GUATEMALAN COFFEE

This Guatemalan strain of coffee was introduced into Hawaii in 1892,

by Hermann A. Widemann who came from Germany and first settled on Kaua'i. He was among the founders of Wai'anae Sugar Plantation on O'ahu, which had several acres of coffee in the Wai'anae and Mākaha areas of the plantation. Widemann pioneered in many fields, particularly in agriculture and utilities. He was one of the early developers of Grove Farm Plantation on Kaua'i, and the Spreckelsville and Wailuku Plantations on Maui. However, he is best remembered as a loyal supporter of the Hawaiian monarchy, serving it from the days of Kamehameha III down to Queen Lili'uokalani. He was a Justice of the Supreme Court of the Hawaiian Government and later Minister of Interior under King Kalākaua. On February 25, 1891, he was appointed Minister of Finance by Queen Lili'uokalani, and in 1892 introduced the Guatemalan strain of coffee.

He gave a portion of this introduced coffee seed to his friend, John M. Horner, a member of the House of Nobles, who carefully planted it in a nursery on his plantation at Kūka'iau, Hāmākua. When the seedlings were a year old, Horner transplanted 400 of them in the orchard to compare with 400 seedlings of the old "Hawaiian" strain of coffee of identical age which he had planted on the same day he had planted the Guatemalan strain. By 1895, Horner was convinced of the superiority of the Guatemalan strain over the old "Hawaiian" strain of coffee.

In Kona, Miller left the plantation before the Guatemalan seedlings could be transplanted in the field. However, in 1897 Zentaro Inaba planted the Wai'aha area of North Kona with these Guatemalan seedlings, which were started by Miller.³⁴ In 1898, Kunigoro Yokoyama purchased Guatemalan seeds from Horner and raised enough seedlings to plant in 1899 one hundred acres in Kamalumu, North Kona.³⁵

Within a decade, coffee farmers of Kona became convinced that the Guatemalan strain of coffee, which they began to call *Meleken koppe* (American coffee), produced more coffee per acre for the same amount of fertilizer and labor input than the *Kanaka koppe* (Hawaiian coffee) which was introduced by Wilkinson and others such as Charlton and Little. Consequently, since 1900 new coffee plantings have been limited to the Guatemalan strain. One of the great benefits Hawai'i received from the coffee "boom" of 1890s was, thus, the introduction of the Guatemalan strain of coffee by Hermann A. Widemann.

PORTUGUESE COFFEE PLANTERS

In 1895, there were approximately 60 Portuguese families on Maui who owned land, and every one of them had some coffee growing on his farm. In 1896 and in the years following, a considerable number of

Portuguese settled in the neighborhood of Hōlualoa, North Kona, as coffee farmers.³⁶

When the Anglo-Saxons and other Caucasians began leaving the coffee industry in the latter part of the '90s, the Portuguese were the only Caucasians who remained as "dirt farmers" in the coffee orchards at the turn of the century. But when the prices continued to fall, Portuguese, too, left the coffee farms.

SUGAR REPLACES COFFEE IN 'ŌLA'A

The rush to grow more coffee in Hawai'i in the 1890s was duplicated in other parts of the world. Gradually a coffee surplus was built up, forcing down world prices. In 1897, Kona coffee was selling for \$27 per hundredweight, but it fell to \$15.80 the following year. The decline continued and prices dropped to \$10 in 1900. Coffee farmers were demoralized; many were forced to sell out and leave. Some pulled up the coffee plants and replanted with sugar cane which appeared to be the more promising crop.

Hackfeld & Company offered to buy all the coffee orchards in 'Ōla'a and Puna. By 1899, the company had taken over an extensive coffee area, consolidating the farms under one management.³⁷ But prices continued to fall and at the turn of the century, the Hackfeld coffee fields of many thousands of acres in 'Ōla'a and Puna were converted into cane fields, becoming a part of the 'Ōla'a Sugar Company.³⁸

In 1900, when the Organic Act was approved, the five percent *ad valorem* import duty on foreign coffee was nullified. This further reduced the price of coffee to \$10 and below. The sugar industry rejoiced because the entire United States became its market, while the coffee industry had no cause to be happy.

JAPANESE COFFEE FARM TENANTS

By 1905, only a few large plantations owned by wealthy *haole* interests were left. At first, they attempted to operate on a share-crop basis, but eventually the land was divided into small farms of approximately five acres each and leased to farm families. Most of them were Japanese, former employees on the coffee plantations. In general, these coffee farmers were young couples in their early twenties, having just completed their contracts of three years with some sugar plantation.

Both husband and wife worked in the coffee orchards. Coffee farming was hard, but they endured silently and worked industriously, living as frugally as possible. They enjoyed the free and friendly life style of

Kona, which was quite unlike the inhuman, slave-like days of the sugar plantation. They had the privilege of living their own lives and raising their children as free people. They were satisfied and happy; they rarely left Kona once they became coffee farmers. Most of them devoted the rest of their lives to coffee growing, just as their fathers and grandfathers had dedicated themselves to rice cultivation in Japan. They worked conscientiously to produce high grade coffee, observing how other successful coffee farmers operated and adopting progressive practices. They applied liberal amounts of chemical fertilizers as instructed, and pruning practices were meticulously observed.

Though coffee prices were low, up one year and down the next, these Japanese farmers never gave up. They kept the orchards free of weeds and succeeded in increasing the coffee acreage of Kona to over 5,000. Production increased, and for several years they produced the world's best quality coffee, averaging in the neighborhood of 10 million pounds a year. One year the production was close to 18 million pounds. They became known as the highest producers of excellent coffee per acre in the world. Between 1950 and 1965, men representing large coffee plantations of Central and South America and government officials came to Kona to study how the Kona farmers produced so much coffee.

The immigrant coffee farmers did not get rich in a monetary way. Their leased farms were too small, and the price of coffee during their long years of work had been rather low. Yet they were happy. They loved the freedom of being coffee farmers in Kona.

Today in Kona, there are approximately 700-odd coffee growers, practically all part-time farmers. One-third of them are Filipinos who followed the Japanese in leaving the sugar plantations, and the remaining two-thirds are the sons and daughters of the earlier Japanese small farmers. The cultivated coffee orchards have shrunk from 5,000 acres to approximately 2,400 acres, and the annual production is no longer 10 million pounds. It varies from 1.25 million to 2.5 million pounds of coffee per year. A cooperative owned and operated by the farmers processes and markets the Kona coffee.

During the last few years, the price of coffee has been very high. It reached the highest mark in 1977 when some sold for as high as \$323 per hundredweight. Compare this price with that of 1900 and thereabouts when it was in the neighborhood of \$10! The 1978 price was around \$195 per hundredweight, disappointing to those who cannot forget the record 1977 figure of \$323.

THE FIVE-YEAR CONTRACT

Unfortunately, even at such prices the hard work of coffee growing has not attracted American citizens, even of Japanese background whose immigrant ancestors were the champion producers. Neither has it attracted the Filipino group nor those of other ethnic backgrounds. Their dislike for the tedious hand harvesting of each individual coffee berry seems to be the reason for their willingness to give up the coffee industry. This gloomy prospect was relieved in 1981 when the American subsidiary of a Dutch coffee company signed a five-year contract with the Kona Farmers Cooperative guaranteeing a minimum price of \$290 per hundredweight for the crop. Coffee raising is still tedious work, but the five-year minimum price contract brought new income stability for small farmers raising what is regarded as the world's highest quality coffee. Only time will tell whether that stability can be maintained.

NOTES

¹ Don Francisco de Paula Marin, journal, transl. by Robert C. Wyllie, photostatic copy, AH. The published version of this journal (Ross H. Gast and Agnes C. Conrad, *Don Francisco de Paula Marin* [Honolulu: University Press of Hawaii for the Hawaiian Historical Society, 1973]) gives the date of these first coffee plantings incorrectly as 1817.

² *Transactions*, RHAS, 1, No. 1 (August 1850), 50.

³ HAA, 1876, p. 46.

⁴ *Transactions*, RHAS, 1, No. 2 (August 1851), 55-56.

⁵ *Transactions*, RHAS, 1, No. 1 (August 1850), 50-51.

⁶ HAA, 1876, p. 47.

⁷ *Hawaiian Spectator*, 2, No. 1 (1839), 396.

⁸ *Hawaiian Spectator*, 1, No. 1 (January 1838), 70.

⁹ *Hawaiian Spectator*, 1, No. 2 (April 1838), 77.

¹⁰ L. A. Thurston, ed., *The Fundamental Law of Hawai'i* (Honolulu: Hawaiian Gazette Co., 1904), p. 122.

¹¹ HAA, 1876, pp. 46-48.

¹² HAA, 1876, p. 51. *Thrum's Annual* states:

These 'little coffee orchards' were called 'patches', as they were so small as to require no employed labor outside of each individual family labor. This form of farming fitted in the native economy excellently as they were not dependent upon coffee for livelihood. It was a new source of cash income for most of them.

¹³ Personal interview with John Gaspar, 13 March 1937.

¹⁴ HAA, 1876, p. 51.

¹⁵ Personal interview with John G. Machado, 13 March 1937.

¹⁶ *Ibid.*

¹⁷ HAA, 1895, p. 65.

- ¹⁸ Interview, Machado.
- ¹⁹ HAA, 1895, p. 66
- ²⁰ HAA, 1899, pp. 177-182.
- ²¹ PP, December 1896, p. 179.
- ²² Jean Hobbs, *Hawai'i, a Pageant of the Soil* (Stanford: Stanford University Press, 1935), pp. 115-116.
- ²³ HAA, 1899, pp. 177-182.
- ²⁴ Personal interview with Robert Wallace, 6 May 1930.
- ²⁵ *Kona Echo*, 18 May 1899, p. 13.
- ²⁶ *Transactions*, RHAS, 1, No. 4 (1853), 49-50.
- ²⁷ *Transactions*, RHAS, 2, No. 1 (June 1854), 38-39.
- ²⁸ Personal interview with Ella Paris, by Baron Goto and John Coulter, 23 August 1934.
- ²⁹ Kun Ai Chung, *My Seventy-nine Years in Hawai'i* (Hong Kong: The Cosmorama Pictorial Publisher, 1960), p. 76.
- ³⁰ PCA, 5 October 1894.
- ³¹ Chung, *Seventy-nine Years*, p. 76.
- ³² Personal interview with J. Nakatsu, 8 October 1934.
- ³³ Personal interview with Frank Greenwell, 10 January 1933.
- ³⁴ Personal interview with Zentaro Inaba, by Baron Goto and John Coulter, 16 August 1934.
- ³⁵ Personal interview with Kunigoro Yokoyama, by Baron Goto and John Coulter. 19 August 1934.
- ³⁶ *Kona Echo*, 23 October 1897, pp. 11-12.
- ³⁷ PCA, 6 June 1899, p. 8; 'Ōla'a Sugar Company succeeded in purchasing most the the 'Ōla'a coffee farms.
- ³⁸ Ethel Damon, *Koamalu*, 2 vols. (Honolulu: privately printed, 1931), II, 872.